EXHIBIT A:
MARKED-UP VERSION OF THE CLAIM AMENDMENTS
(indicating additions by underlining and deletions by bracketing)
Application No. 09/411,075 Atty. Docket No. 8449-054-999

51. (Amended) A method for screening a small organic molecule for the ability to modulate heat shock protein receptor activity comprising:

(a) contacting heat shock receptor positive cells with the small organic molecule; and

(b) comparing the level of heat shock protein receptor binding activity in the heat shock receptor positive cells contacted with the small organic molecule to the amount of heat shock protein receptor binding activity in the heat shock receptor positive cells not so contacted,

wherein an increase or decrease in the amount of heat shock protein receptor binding activity in the contacted heat shock receptor positive cells relative to the amount of heat shock protein receptor binding activity in the heat shock receptor positive cells not so contacted indicates that the small organic molecule has the ability to modulate heat shock protein receptor activity.

55. (Amended) The method of claim 51 wherein the level of heat shock protein receptor binding activity is assayed by measuring the ability of the small organic molecule to bind to the heat shock protein receptor positive cells.

56. (Amended) [The method of claim 51]A method for screening a molecule for the ability to modulate heat shock protein receptor activity comprising:

(a) contacting heat shock receptor positive cells with the molecule; and

(b) comparing the level of heat shock protein receptor binding activity in the heat shock receptor positive cells contacted with the molecule to the amount of heat shock protein receptor binding activity in the heat shock receptor positive cells not so contacted,

wherein an increase or decrease in the amount of heat shock protein receptor binding activity in the contacted heat shock receptor positive cells relative to the amount of heat shock protein

receptor binding activity in the heat shock receptor positive cells not so contacted indicates that the small molecule has the ability to modulate heat shock protein receptor activity, wherein the level of heat shock protein receptor binding activity is assayed by measuring the ability of the molecule to modulate the binding of a heat shock protein or a heat shock protein-peptide complex to the cells.

57. (Amended) The method of claim 51 or 56 wherein the heat shock protein receptor binding activity is the ability to interact with a heat shock protein receptor antibody.

63. (Amended) The method of claim [51] 56 wherein the molecule is a peptide or protein, or derivative, analog or fragment thereof.

65. (Amended) The method of claim [51] 56 wherein the molecule is a small organic molecule, a nonpeptide, or an antibody.

67. (Amended) The method of claim 51 or 65 wherein the small organic molecule is a member of a small molecule library.

68. (Amended) The method of claim 51 or 56 wherein the molecule is attached to a solid surface.

69. (Amended) A method for identifying a molecule useful for the treatment of cancer comprising carrying out the method of claim 51 or 56, further comprising the step of administering the molecule to a non-human animal having a tumor, and determining whether the molecule alters tumor progression in the non-human animal.

70. (Amended) A method for identifying a molecule useful for the treatment of an infectious disease comprising carrying out the method of claim 51 or 56, further comprising the step of administering the molecule to a non-human animal infected with a pathogen, and determining whether the molecule ameliorates the infectious disease in the non-human animal.

71. (Amended) A method for identifying a molecule useful for the treatment of an autoimmune disease comprising carrying out the method of claim 51 or 56, further comprising the step of administering the molecule to a non-human animal suffering from an autoimmune disease, and determining whether the molecule ameliorates the autoimmune disease in the non-human animal.

77. (Amended) The method of claim 51, 56, 69, 70, 71, wherein the heat shock protein receptor is selected from the group consisting of an Hsp70 receptor, an Hsp 90 receptor, and a gp96 receptor.

78. (Amended) The method of claim 51, 56, 69, 70, 71, wherein the heat shock protein receptor positive cells are purified from heat shock protein receptor negative cells.

79. (Amended) A method for screening a plurality of molecules for one or more molecules having the ability to modulate, directly or indirectly, the ability of heat shock receptor positive cells to stimulate the activation of cytotoxic T cells *in vitro* comprising:

(a) [adding] contacting said plurality of molecules with: (i) [to a mixture of] heat shock protein receptor positive cells; (ii) a purified complex of a heat shock protein and a peptide; and (iii) cytotoxic T_c under conditions conducive to the activation of cytotoxic T cells;

(b) comparing antigenic cell cytotoxicity of said T cells with the cytotoxicity of T cells [that are formed] in the absence of said plurality of molecules,

wherein a lower or higher degree of cytotoxicity indicates that one or more molecules in said plurality of molecules modulates the ability of heat shock receptor positive cells to stimulate the activation of cytotoxic T cells against the peptide.

80. (Amended) A method for screening an antibody specific to a heat shock protein or a heat shock protein receptor for the ability to modulate, directly or indirectly, the ability of heat shock receptor positive cells to stimulate the activation of cytotoxic T cells *in vitro* comprising:

(a) [adding] contacting the antibody [to a mixture of] with heat shock protein receptor positive cells and cytotoxic T cells under conditions conducive to the activation of cytotoxic T cells; and

(b) comparing antigenic cell cytotoxicity of said T cells with the cytotoxicity of T cells [that are formed] in the absence of said antibody,

wherein a lower or higher degree of cytotoxicity indicates that the antibody modulates the ability of heat shock receptor positive cells to stimulate the activation of cytotoxic T cells against the peptide.

81. (Amended) A method for screening a molecule for the ability to modulate, directly or indirectly, the ability of heat shock receptor positive cells to stimulate the activation of cytotoxic T cells *in vitro* comprising:

(a) [adding] contacting the molecule [to a mixture of] with: (i) purified heat shock protein receptor positive cells, [and] (ii) a purified complex of a heat shock protein and a peptide; and (iii) cytotoxic T cells, under conditions conducive to the activation of cytotoxic T cells; and

(b) comparing antigenic cell cytotoxicity of said T cells with the cytotoxicity of T cells [that are formed] in the absence of said molecule,

wherein a lower or higher degree of cytotoxicity indicates that the molecule modulates the ability of heat shock receptor positive cells to stimulate the activation of cytotoxic T cells against the peptide.

82. (Amended) A method for screening a plurality of molecules for one or more molecule(s) having the ability to modulate, directly or indirectly, antigen presentation activity of heat shock receptor positive cells comprising:

(a) [adding] contacting said plurality of molecules [to] with heat shock protein receptor positive cells;

(b) measuring antigen presentation by said heat shock protein receptor positive cells in the presence of said plurality of molecules; and

(c) comparing antigen presentation activity by the heat shock receptor positive cells in the presence of said plurality of molecules with the antigen

presentation activity by the heat shock receptor positive cells in the absence of said plurality of molecules,

wherein a lower or higher degree of antigen presentation indicates that one or more molecule(s) modulates the antigen presentation activity of the heat shock receptor positive cells.

83. (Amended) A method for screening an antibody specific to a heat shock protein or a heat shock protein receptor for the ability to modulate, directly or indirectly, antigen presentation activity of heat shock receptor positive cells comprising:

(a) [adding] contacting an antibody specific to a heat shock protein or a heat shock protein receptor [to] with heat shock protein receptor positive cells;

(b) measuring antigen presentation by said heat shock protein receptor positive cells in the presence of said antibody; and

(c) comparing antigen presentation activity by the heat shock receptor positive cells in the presence of the antibody with the antigen presentation activity by the heat shock receptor positive cells in the absence of the antibody,

wherein a lower or higher degree of antigen presentation indicates that the antibody modulates the antigen presentation activity of the heat shock receptor positive cells.

84. (Amended) A method for screening a molecule for the ability to modulate, directly or indirectly, antigen presentation activity of heat shock receptor positive cells comprising:

(a) [adding] contacting a molecule [to] with: (i) a purified complex of a heat shock protein and a peptide; and (ii) purified heat shock protein receptor positive cells;

(b) measuring antigen presentation by said heat shock protein receptor positive cells in the presence of said molecule; and

(c) comparing the [anitigen] antigen presentation activity by the purified heat shock receptor positive cells in the presence of the molecule with the antigen presentation activity by purified heat shock receptor positive cells in the absence of the molecule,

wherein a lower or higher degree of antigen presentation indicates that the molecule modulates the antigen presentation activity of the heat shock receptor positive cells.

Add new claims 103-111, as follows:

103. (New) A method for screening a peptide library for the ability to modulate heat shock protein receptor activity comprising:

(a) contacting heat shock receptor positive cells with a member of a peptide library; and

(b) comparing the level of heat shock protein receptor binding activity in the heat shock receptor positive cells contacted with the member of the peptide library to the amount of heat shock protein receptor binding activity in the heat shock receptor positive cells not so contacted,

wherein an increase or decrease in the amount of heat shock protein receptor binding activity in the contacted heat shock receptor positive cells relative to the amount of heat shock protein receptor binding activity in the heat shock receptor positive cells not so contacted indicates that the member of the peptide library has the ability to modulate heat shock protein receptor activity.

104. (New) The method of claim 103 wherein the level of heat shock protein receptor binding activity is assayed by measuring the ability of the member of the peptide library to bind to the heat shock protein receptor positive cells.

105. (New) The method of claim 103 wherein the heat shock protein receptor binding activity is the ability to interact with a heat shock protein receptor antibody.

106. (New) The method of claim 103 wherein the member of the peptide library is attached to a solid surface.

107. (New) A method for identifying a molecule useful for the treatment of cancer comprising carrying out the method of claim 103, further comprising the step of administering the member of the peptide library to a non-human animal having a tumor, and determining whether the molecule alters tumor progression in the non-human animal.

108. (New) A method for identifying a molecule useful for the treatment of an infectious disease comprising carrying out the method of claim 103, further comprising the step of administering the member of the peptide library to a non-human animal infected with a pathogen, and determining whether the molecule ameliorates the infectious disease in the non-human animal.

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109. (New) A method for identifying a molecule useful for the treatment of an autoimmune disease comprising carrying out the method of claim 103, further comprising the step of administering the molecule to a non-human animal suffering from an autoimmune disease, and determining whether the molecule ameliorates the autoimmune disease in the non-human animal.

110. (New) The method of claim 103, wherein the heat shock protein receptor is selected from the group consisting of an Hsp70 receptor, an Hsp 90 receptor, and a gp96 receptor.

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111. (New) The method of claim 103, wherein the heat shock protein receptor positive cells are purified away from heat shock protein receptor negative cells.

REMARKS

Claims 51, 55-60, 63-71, and 77-102 were pending in the above-identified application. However, according to the Notice of Allowability, mailed February 6, 2002, Claims 51, 55-60, 63-71, and 77-102 were renumbered as 1-3, 13-15, 4, 5,16, 6, 17, 18, 7-12, 19-24, 40, 25, 26, 41, 42, 27, 35, 28, 29, 36, 30, 37, 31, 38, 32, 33, 34 and 39, respectively. As per the telephone conversation between Eileen Falvey and Examiner Davis on May 22, 2002, for the purpose of clarity, the original claim numbers are referred to in this amendment.

By this amendment, claims 51, 55-57, 63, 65, 57-71, and 79-84 are amended, and new claims 103-111 are added, to clarify the invention. The new claims and amendments are supported in the specification and do not represent new subject matter. In particular, support for the claim amendments can be found in the specification as follows:

Claims	Claim Recitation	Support
51, 55	• recites a small organic molecule.	page 73, lines 29-31.
56	• recites a method for screening a molecule for the ability to modulate heat shock protein receptor activity.	page 73, lines 29-31.
79, 81	• recites a purified complex of a heat shock protein and a peptide.	page 4, lines 14-15; and page 72, line 7.
	• recites the ability of heat shock receptor positive cells to stimulate the activation of cytotoxic T cells against the peptide.	page 5, lines 31-33.
80	• recites the ability of heat shock receptor positive cells to stimulate the activation of cytotoxic T cells against the peptide.	page 5, lines 31-33.
84	• recites adding a molecule to a mixture of a purified complex of a heat shock protein and a peptide.	page 74, lines 12-24.
103	A method for screening a member of a peptide library for the ability to modulate heat shock protein receptor activity.	page 74, lines 5-8.
104	• recites measuring the ability of the member of the peptide library bind to the heat shock protein receptor positive cells.	page 74, lines 5-8.
105	• recites the ability to interact with a heat shock protein receptor antibody.	page 74, lines 20-21.
106	• recites the member of the peptide library attached to a solid surface.	page 77, lines 3-11.
107	• recites administering the member of the peptide library to a non-human animal having a tumor, and determining whether the molecule alters tumor progression in the non-human animal.	page 104, lines 4-5.
108	• recites administering the member of the peptide library to a non-human animal infected with a pathogen, and determining whether the molecule ameliorates the infectious disease in the non-human animal.	page 103, line 10 through page 104, line 2.
109	• recites administering the molecule to a non-human animal suffering from an autoimmune disease, and determining whether the molecule ameliorates the autoimmune disease in the non-human animal.	page 89, lines 31-33.
110	• recites Hsp70 receptor, an Hsp 90 receptor, and a gp96 receptor.	page 10, lines 32-34.
111	• recites heat shock protein receptor positive cells purified from heat shock protein receptor negative cells.	page 8, lines 15-17.

A marked-up version of the claim amendments are attached hereto as Exhibit A, which indicates added matter by underlining and deleted matter by brackets.

Thus, claims 51, 55-60, 63-71, and 77-111 (new claim numbers 1-3, 13-15, 4, 5,16, 6, 17, 18, 7-12, 19-24, 40, 25, 26, 41, 42, 27, 35, 28, 29, 36, 30, 37, 31, 38, 32, 33, 34, 39, and claims 103-112, respectively) will be pending upon entry of the instant amendments. A copy of the pending claims upon entry of the amendments is attached hereto as Exhibit B, using the old claim numbers, with reference to the new claim number in parentheses.

Entry of the foregoing amendments and remarks is respectfully requested. If any outstanding issues remain, Applicant respectfully requests that the Examiner call the undersigned to discuss such issues.

Respectfully submitted,

Date: May 22, 2002

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Enclosures

EXHIBIT B:
PENDING CLAIMS
Application No. 09/411,075 Atty. Docket No. 8449-054-999
(as amended May 22, 2002)
(indicating new claim numbers in parentheses)

51. (new claim 1) A method for screening a small organic molecule for the ability to modulate heat shock protein receptor activity comprising:

(a) contacting heat shock receptor positive cells with the small organic molecule; and

(b) comparing the level of heat shock protein receptor binding activity in the heat shock receptor positive cells contacted with the small organic molecule to the amount of heat shock protein receptor binding activity in the heat shock receptor positive cells not so contacted,

wherein an increase or decrease in the amount of heat shock protein receptor binding activity in the contacted heat shock receptor positive cells relative to the amount of heat shock protein receptor binding activity in the heat shock receptor positive cells not so contacted indicates that the small organic molecule has the ability to modulate heat shock protein receptor activity.

55. (new claim 2) The method of claim 51 wherein the level of heat shock protein receptor binding activity is assayed by measuring the ability of the small organic molecule to bind to the heat shock protein receptor positive cells.

56. (new claim 3) A method for screening a molecule for the ability to modulate heat shock protein receptor activity comprising:

(a) contacting heat shock receptor positive cells with the molecule; and

(b) comparing the level of heat shock protein receptor binding activity in the heat shock receptor positive cells contacted with the molecule to the amount of heat shock protein receptor binding activity in the heat shock receptor positive cells not so contacted,

wherein an increase or decrease in the amount of heat shock protein receptor binding activity in the contacted heat shock receptor positive cells relative to the amount of heat shock protein receptor binding activity in the heat shock receptor positive cells not so contacted indicates that the small molecule has the ability to modulate heat shock protein receptor activity, wherein the level of heat shock protein receptor binding activity is assayed by measuring the ability of the molecule to modulate the binding of a heat shock protein or a heat shock protein-peptide complex to the cells.

57. (new claim 13) The method of claim 51 or 56 wherein the heat shock protein receptor binding activity is the ability to interact with a heat shock protein receptor antibody.

58. (new claim 14) The method of claim 56 wherein the molecule decreases the binding of the heat shock protein or the heat shock protein-peptide complex to the cells.

59. (new claim 15) The method of any one of claims 56 to 58 wherein the heat shock protein is an Hsp70, an Hsp 90, or gp96.

60. (new claim 4) The method of claim 51 wherein the heat shock protein receptor binding activity is the ability to interact with a heat shock protein receptor antibody.

63. (new claim 5) The method of claim 56 wherein the molecule is a peptide or protein, or derivative, analog or fragment thereof.

64. (new claim 16) The method of claim 63 wherein the peptide is a member of a peptide library.

65. (new claim 6) The method of claim 56 wherein the molecule is a small organic molecule, a nonpeptide, or an antibody.

66. (new claim 17) The method of claim 65 wherein the nonpeptide is a member of a nonpeptide library.

67. (new claim 18) The method of claim 51 or 65 wherein the small organic molecule is a member of a small molecule library.

68. (new claim 7) The method of claim 51 wherein the molecule is attached to a solid surface.

69. (new claim 8) A method for identifying a molecule useful for the treatment of cancer comprising carrying out the method of claim 51 or 56, further comprising the step of administering the molecule to a non-human animal having a tumor, and determining whether the molecule alters tumor progression in the non-human animal.

70. (new claim 9) A method for identifying a molecule useful for the treatment of an infectious disease comprising carrying out the method of claim 51 or 56, further comprising the step of administering the molecule to a non-human animal infected with a pathogen, and determining whether the molecule ameliorates the infectious disease in the non-human animal.

71. (new claim 10) A method for identifying a molecule useful for the treatment of an autoimmune disease comprising carrying out the method of claim 51 or 56, further comprising the step of administering the molecule to a non-human animal suffering from an autoimmune disease, and determining whether the molecule ameliorates the autoimmune disease in the non-human animal.

77. (new claim 11) The method of claim 51, 56, 69, 70, 71, wherein the heat shock protein receptor is selected from the group consisting of an Hsp70 receptor, an Hsp 90 receptor, and a gp96 receptor.

78. (new claim 12) The method of claim 51, 56, 69, 70, 71, wherein the heat shock protein receptor positive cells are purified from heat shock protein receptor negative cells.

79. (new claim 19) A method for screening a plurality of molecules for one or more molecules having the ability to modulate, directly or indirectly, the ability of heat shock receptor positive cells to stimulate the activation of cytotoxic T cells *in vitro* comprising:

(a) contacting said plurality of molecules with: (i) heat shock protein receptor positive cells; (ii) a purified complex of a heat shock protein and a peptide; and (iii) cytotoxic T cells, under conditions conducive to the activation of cytotoxic T cells; and

(b) comparing antigenic cell cytotoxicity of said T cells with the cytotoxicity of T cells in the absence of said plurality of molecules,

wherein a lower or higher degree of cytotoxicity indicates that one or more molecules in said plurality of molecules modulates the ability of heat shock receptor positive cells to stimulate the activation of cytotoxic T cells against the peptide.

80. (new claim 20) A method for screening an antibody specific to a heat shock protein or a heat shock protein receptor for the ability to modulate, directly or indirectly, the ability of heat shock receptor positive cells to stimulate the activation of cytotoxic T cells *in vitro* comprising:

(a) contacting the antibody with heat shock protein receptor positive cells and cytotoxic T cells under conditions conducive to the activation of cytotoxic T cells; and

(b) comparing antigenic cell cytotoxicity of said T cells with the cytotoxicity of T cells in the absence of said antibody,

wherein a lower or higher degree of cytotoxicity indicates that the antibody modulates the ability of heat shock receptor positive cells to stimulate the activation of cytotoxic T cells against the peptide.

81. (new claim 21) A method for screening a molecule for the ability to modulate, directly or indirectly, the ability of heat shock receptor positive cells to stimulate the activation of cytotoxic T cells *in vitro* comprising:

(a) contacting the molecule with: (i) purified heat shock protein receptor positive cells; (ii) a purified complex of a heat shock protein and a peptide; and (iii)

cytotoxic T cells, under conditions conducive to the activation of cytotoxic T cells; and

(b) comparing antigenic cell cytotoxicity of said T cells with the cytotoxicity of T cells in the absence of said molecule,

wherein a lower or higher degree of cytotoxicity indicates that the molecule modulates the ability of heat shock receptor positive cells to stimulate the activation of cytotoxic T cells against the peptide.

82. (new claim 22) A method for screening a plurality of molecules for one or more molecule(s) having the ability to modulate, directly or indirectly, antigen presentation activity of heat shock receptor positive cells comprising:

(a) contacting said plurality of molecules with heat shock protein receptor positive cells;

(b) measuring antigen presentation by said heat shock protein receptor positive cells in the presence of said plurality of molecules; and

(c) comparing antigen presentation activity by the heat shock receptor positive cells in the presence of said plurality of molecules with the antigen presentation activity by the heat shock receptor positive cells in the absence of said plurality of molecules,

wherein a lower or higher degree of antigen presentation indicates that one or more molecule(s) modulates the antigen presentation activity of the heat shock receptor positive cells.

83. (new claim 23) A method for screening an antibody specific to a heat shock protein or a heat shock protein receptor for the ability to modulate, directly or indirectly, antigen presentation activity of heat shock receptor positive cells comprising:

(a) contacting an antibody specific to a heat shock protein or a heat shock protein receptor with heat shock protein receptor positive cells;

(b) measuring antigen presentation by said heat shock protein receptor positive cells in the presence of said antibody; and

(c) comparing antigen presentation activity by the heat shock receptor positive cells in the presence of the antibody with the antigen presentation activity by the heat shock receptor positive cells in the absence of the antibody,

wherein a lower or higher degree of antigen presentation indicates that the antibody modulates the antigen presentation activity of the heat shock receptor positive cells.

84. (new claim 24) A method for screening a molecule for the ability to modulate, directly or indirectly, antigen presentation activity of heat shock receptor positive cells comprising:

(a) contacting a molecule with: (i) a purified complex of a heat shock protein and a peptide; and (ii) purified heat shock protein receptor positive cells;

(b) measuring antigen presentation by said heat shock protein receptor positive cells in the presence of said molecule; and

(c) comparing the antigen presentation activity by the purified heat shock receptor positive cells in the presence of the molecule with the antigen presentation activity by purified heat shock receptor positive cells in the absence of the molecule,

wherein a lower or higher degree of antigen presentation indicates that the molecule modulates the antigen presentation activity of the heat shock receptor positive cells.

85. (new claim 40) The method of claim 82, 83, or 84, wherein measuring antigen presentation is carried out by measuring representation of a peptide by an MHC molecule.

86. (new claim 25) The method of claim 79, 81, 82, or 84, wherein the molecule is a peptide or protein, or derivative, analog or fragment thereof.

87. (new claim 26) The method of claim 79, 81, 82, or 84, wherein the molecule is a small organic molecule or a nonpeptide.

88. (new claim 41) The method of claim 87, wherein the nonpeptide is a member of a nonpeptide library.

89. (new claim 42) The method of claim 87, wherein the small organic molecule is a member of a small molecule library.

90. (new claim 27) The method of claim 79, 81, 82, or 84, wherein the molecule is attached to a solid surface.

91. (new claim 35) The method of claim 80 or 83, wherein the antibody is attached to a solid surface.

92. (new claim 28) The method of claim 79, 80, 81, 82, 83, or 84, wherein the heat shock protein receptor positive cells are macrophage or dendritic cells.

93. (new claim 29) A method for identifying a molecule useful for the treatment of cancer comprising carrying out the method of claim 79, 81, 82, or 84, further comprising the step of administering the molecule to a non-human animal having a tumor, and determining whether the molecule alters tumor progression in the non-human animal.

94. (new claim 36) A method for identifying an antibody useful for the treatment of cancer comprising carrying out the method of claim 80 or 83, further comprising the step of administering the antibody to a non-human animal having a tumor, and determining whether the antibody alters tumor progression in the non-human animal.

95. (new claim 30) A method for identifying a molecule useful for the treatment of an infectious disease comprising carrying out the method of claim 79, 81, 82, or 84, further comprising the step of administering the molecule to a non-human animal infected with a pathogen, and determining whether the molecule ameliorates the infectious disease in the non-human animal.

96. (new claim 37) A method for identifying an antibody useful for the treatment of an infectious disease comprising carrying out the method of claim 80 or 83, further comprising the step of administering the antibody to a non-human animal infected with a pathogen, and

determining whether the antibody ameliorates the infectious disease in the non-human animal.

97. (new claim 31) A method for identifying a molecule useful for the treatment of an autoimmune disease comprising carrying out the method of claim 79, 81, 82, or 84, further comprising the step of administering the molecule to a non-human animal suffering from an autoimmune disease, and determining whether the molecule ameliorates the autoimmune disease in the non-human animal.

98. (new claim 38) A method for identifying an antibody useful for the treatment of an autoimmune disease comprising carrying out the method of claim 80 or 83, further comprising the step of administering the antibody to a non-human animal suffering from an autoimmune disease, and determining whether the antibody ameliorates the autoimmune disease in the non-human animal.

99. (new claim 32) The method of claim 79, 80, 81, 82, 83, or 84, wherein the heat shock protein receptor is selected from the group consisting of an Hsp70 receptor, an Hsp 90 receptor, and a gp96 receptor.

100. (new claim 33) The method of claim 79, 80, 81, 82, 83, or 84, wherein the heat shock protein receptor positive cells are purified from heat shock protein receptor negative cells.

101. (new claim 34) The method of claim 79, 81, 82, or 84, wherein the molecule is purified.

102. (new claim 39) The method of claim 80 or 83, wherein the antibody is purified.

103. A method for screening a peptide library for the ability to modulate heat shock protein receptor activity comprising:

(a) contacting heat shock receptor positive cells with a member of a peptide library; and

(b) comparing the level of heat shock protein receptor binding activity in the heat shock receptor positive cells contacted with the member of the peptide library to the amount of heat shock protein receptor binding activity in the heat shock receptor positive cells not so contacted,

wherein an increase or decrease in the amount of heat shock protein receptor binding activity in the contacted heat shock receptor positive cells relative to the amount of heat shock protein receptor binding activity in the heat shock receptor positive cells not so contacted indicates that the member of the peptide library has the ability to modulate heat shock protein receptor activity.

104. The method of claim 103 wherein the level of heat shock protein receptor binding activity is assayed by measuring the ability of the member of the peptide library to bind to the heat shock protein receptor positive cells.

105. The method of claim 103 wherein the heat shock protein receptor binding activity is the ability to interact with a heat shock protein receptor antibody.

106. The method of claim 103 wherein the member of the peptide library is attached to a solid surface.

107. A method for identifying a molecule useful for the treatment of cancer comprising carrying out the method of claim 103, further comprising the step of administering the member of the peptide library to a non-human animal having a tumor, and determining whether the molecule alters tumor progression in the non-human animal.

108. A method for identifying a molecule useful for the treatment of an infectious disease comprising carrying out the method of claim 103, further comprising the step of administering the member of the peptide library to a non-human animal infected with a pathogen, and determining whether the molecule ameliorates the infectious disease in the non-human animal.

109. A method for identifying a molecule useful for the treatment of an autoimmune disease comprising carrying out the method of claim 103, further comprising the step of administering the molecule to a non-human animal suffering from an autoimmune disease, and determining whether the molecule ameliorates the autoimmune disease in the non-human animal.

110. The method of claim 103, wherein the heat shock protein receptor is selected from the group consisting of an Hsp70 receptor, an Hsp 90 receptor, and a gp96 receptor.

111. The method of claim 103, wherein the heat shock protein receptor positive cells are purified away from heat shock protein receptor negative cells.

Claims	Claim Recitation	Support
51, 55	• recites a small organic molecule.	page 73, lines 29-31.
56	• recites a method for screening a molecule for the ability to modulate heat shock protein receptor activity.	page 73, lines 29-31.
79, 81	• recites a purified complex of a heat shock protein and a peptide.	page 4, lines 14-15; and page 72, line 7.
	• recites the ability of heat shock receptor positive cells to stimulate the activation of cytotoxic T cells against the peptide.	page 5, lines 31-33.
80	• recites the ability of heat shock receptor positive cells to stimulate the activation of cytotoxic T cells against the peptide.	page 5, lines 31-33.
84	• recites adding a molecule to a mixture of a purified complex of a heat shock protein and a peptide.	page 74, lines 12-24.
103	A method for screening a member of a peptide library for the ability to modulate heat shock protein receptor activity.	page 74, lines 5-8.
104	• recites measuring the ability of the member of the peptide library bind to the heat shock protein receptor positive cells.	page 74, lines 5-8.
105	• recites the ability to interact with a heat shock protein receptor antibody.	page 74, lines 20-21.
106	• recites the member of the peptide library attached to a solid surface.	page 77, lines 3-11.
107	• recites administering the member of the peptide library to a non-human animal having a tumor, and determining whether the molecule alters tumor progression in the non-human animal.	page 104, lines 4-5.
108	• recites administering the member of the peptide library to a non-human animal infected with a pathogen, and determining whether the molecule ameliorates the infectious disease in the non-human animal.	page 103, line 10 through page 104, line 2.
109	• recites administering the molecule to a non-human animal suffering from an autoimmune disease, and determining whether the molecule ameliorates the autoimmune disease in the non-human animal.	page 89, lines 31-33.
110	• recites Hsp70 receptor, an Hsp 90 receptor, and a gp96 receptor.	page 10, lines 32-34.
111	• recites heat shock protein receptor positive cells purified from heat shock protein receptor negative cells.	page 8, lines 15-17.